

SAFETY DATA SHEET



Calvary Industries, Inc. encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ADVANTECH C610A
PRODUCT CODE: CC141D

MANUFACTURER: Calvary Industries, Inc.
9233 Seward Road
Fairfield, Ohio 45014

APPLICATION: Conversion Coating

INFORMATION PHONE: (513) 874-1113
EMERGENCY RESPONSE: (800) 535-5053

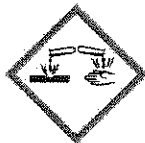
SECTION 2 - HAZARDS IDENTIFICATION

GHS Classification:

Physical	Corrosive to metals 1 - H290
Health	Harmful if Swallowed 4 – H302 Skin Irritation 4– H312 Eye Irritation 1– H318 Respiratory Irritation 5 – H333
Environmental	Not Classified

Label Elements:

Signal Word	Danger!
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HMIS RATING

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

Hazard Statements:

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H318	Causes serious eye damage.
H333	May be harmful if inhaled

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PRODUCT NAME: ADVANTECH C610A

SECTION 2 - HAZARDS IDENTIFICATION (Continued)

Precautionary Statements: P234	Keep only in original container.
P261	Avoid breathing dust/fume/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/ eye protection/face protection.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS NO.</u>	<u>Weight %</u>
Fluorozirconic Acid	12021-95-3	1-5

SECTION 4 - FIRST AID MEASURES

EYES: Immediately flush eyes with large amounts of water for 30 minutes with eyelids open. Apply a few drops of 0.5% pontocaine opthamolic solution to relieve pain and get medical attention.

SKIN: Flush skin with soap and water for at least 15 minutes. Use alkaline soap if available. If irritation occurs, immersion and soak in 0.013% (1:750) iced aqueous Zepherian Chloride solution for 30-60 minutes. Remove contaminated clothing and launder before reuse. Remove contaminated shoes promptly and discard if saturated with product. Seek medical attention.

INHALATION: Remove to fresh air. Get medical attention if symptoms develop. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: Do NOT induce vomiting. Give victim large amounts of water, milk, or milk of magnesia. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water, CO₂, dry chemical, for fires in area. Use water spray to cool container exposed to fire; do not get water inside containers.

FIRE FIGHTING PROCEDURES: Wear self contained breathing apparatus with a full face-piece operated in the positive pressure mode and full body protection when fighting fires.

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PRODUCT NAME: ADVANTECH C610A

SECTION 5 - FIRE FIGHTING MEASURES (CONTINUED)

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product does not present any unusual hazards under fire conditions.

SPECIFIC HAZARDS: This product contains no specific hazards.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear appropriate protective gear described in Section 8 of this safety data sheet.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike area to contain spill. Collect and transfer to storage container.

Persons not wearing protective equipment (see section 8) should be excluded from area of spill until clean-up is completed.

WASTE DISPOSAL METHOD:

Dispose of in accordance with all local, state and federal regulations. Check with local POTW before sewerage material.

SECTION 7 - HANDLING AND STORAGE

HANDLING: ACIDIC PRODUCT CONTAINS FLUORIDE. Avoid contact with eyes, skin or clothing. Can cause severe skin irritation and fluoride-like burns which may not be immediately evident. Wear eye protection and impervious gloves. Wash contaminated clothes before reuse.

STORAGE: Do not store in direct sunlight or hot area. Open drums slowly to vent.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

<u>COMPONENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Fluorozirconic Acid	12021-95-3	5 mg/m ³	5 mg/m ³

RESPIRATORY PROTECTION: Under anticipated operating conditions no respiratory protection should be required. If the TLV is exceeded a NIOSH/MSHA approved respirator for amines and organic vapors should be worn.

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PRODUCT NAME: ADVANTECH C610A

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (CONTINUED)

PROTECTIVE CLOTHING: Waterproof gloves made of neoprene, vinyl, rubber, polyethylene or PVC should be worn if exposure is expected to be prolonged. Safety glasses with side shields or chemical splash goggles should be worn.

ENGINEERING CONTROLS: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear colorless liquid		
ODOR	Mild odor	VAPOUR PRESSURE	No Data
pH	1.5-2.5	VAPOUR DENSITY	No Data
FREEZING POINT	32°F	SPECIFIC GRAVITY	1.036
BOILING POINT	>212°F	SOLUBILITY IN WATER	complete
FLASH POINT	No Data	AUTO-IGNITION TEMP	No Data
EVAPORATION RATE	N/A	VOLATILE ORGANIC COMPOUND (VOC)	0 Lbs/gallon
UPPER/LOWER EXPLOSION LIMITS	No Data	PARTITION COEFFICIENT (n-Octanol/water)	No Data

SECTION 10 - STABILITY AND REACTIVITY

GENERAL: This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS TO AVOID: Avoid contact with strong alkali, strong oxidizers, reactive metals, and chlorinated materials.

CONDITIONS TO AVOID: Contact with incompatible materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen fluoride is highly toxic and corrosive.

SECTION 11 - TOXICOLOGICAL INFORMATION

Harmful or fatal if swallowed. Product is corrosive and can cause burns to contaminated eyes, skin, and any other contaminated tissue. Effects may be delayed. Inhalation exposure to high levels could cause pulmonary edema, which could result in death. Ingestion can result in severe gastric distress with possible vomiting, bloody diarrhea, hypocalcemia, CNS depression, shock, muscle spasms, and death.

SAFETY DATA SHEET

PRODUCT NAME: ADVANTECH C610A

SECTION 11 - TOXICOLOGICAL INFORMATION (Continued)

ROUTES OF EXPOSURE: Eyes, Skin, Inhalation, Ingestion.

POTENTIAL HEALTH EFFECTS

EYES

Acute (Immediate): Will cause irritation.

Chronic (Delayed): Will likely cause chemical burn.

SKIN

Acute (Immediate): May cause burns.

Chronic (Delayed): May produce fluoride burns.

INHALATION

Acute (Immediate): Breathing of mist may cause slight burns to nasal and respiratory system.

Chronic (Delayed): May cause pulmonary edema and congestion

INGESTION:

Acute (Immediate): Will damage mouth, throat, and stomach.

Chronic (Delayed): May cause severe and permanent damage to mouth, throat, and stomach

SECTION 12 - ECOLOGICAL INFORMATION

No specific ecological data is known or reported for this product or its components.

SECTION 13 - DISPOSAL CONSIDERATIONS

If this product becomes a waste, as supplied, it does meet the criteria of a hazardous waste as defined under 40CFR261, in that it exhibits the characteristics of corrosive hazardous waste under Subpart D.

If this product becomes a waste it is the user's responsibility to dispose of the material in accordance with local, state and federal regulations.

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PRODUCT NAME: ADVANTECH C610A

SECTION 14 - TRANSPORT INFORMATION

DOT (Department of Transportation): This product is regulated as a DOT hazardous material.

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Inorganic, N.O.S., (contains acidic fluoride complexes)

HAZARD CLASS: 8

IDENTIFICATION NUMBER: UN3264

PACKING GROUP: III

LABEL(S) REQUIRED: CORROSIVE

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act): Components used in this product are listed on the TSCA Inventory.

SARA TITLE III (Superfund Amendments and Reauthorization Act):

Section 311/312 Hazard Categories (Acute health, Chronic health, Fire, Reactive or Sudden Release of Pressure: Acute health

Section 313: The following toxic chemical(s) is (are) subject to the reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 and 40CFR372.

CHEMICAL NAME	CAS#	WT. %
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NONE

SECTION 16 - OTHER INFORMATION

Calvary Industries urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the date shown. However, no warranty, expressed or implied, is given as to the results of the use of this information or the product to which it relates. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's /user's responsibility to ensure that his activities comply with all federal, state, or local laws. Since conditions for use of this product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Recipient assumes all responsibility for the use (alone or in combination with any other product), storage, or disposal of the product, including any resultant personal injury or property damage.

SAFETY DATA SHEET

PRODUCT NAME: ADVANTECH C610A

New Material

REVISED DATE: 3/17/14

PREPARER: J. Yeary

Tech Cool® 35200TM

High Performance Biostable Semi-Synthetic Metalworking Fluid

PRIMARY APPLICATION

Tech Cool® 35200TM is a semi-synthetic metalworking fluid with superior performance for critical applications. This product contains unique ingredients designed to significantly reduce odors and problems associated with bath life. This proprietary blend of highly polar ingredients provides the necessary balance of cooling and lubrication required for extended tool life without the use of chlorine or sulfur.

Tech Cool 35200TM provides superior chip settling properties and controlled detergency to prevent tacky residues from forming during machining and grinding operations. In addition, the increased stability of this product resists performance depletions due to hard water build-up or microbial actions commonly found with water based metalworking systems.

Tech Cool 35200TM is recommended for machining and grinding ferrous and yellow metal substrates. Because of Tech Cool 35200TM's extraordinary corrosion protection system it is an ideal product for roll forming metals including seamed tube mills where both ferrous and galvanized substrates are processed. Under typical plant storage conditions, parts should remain free of corrosion for 30 days.

CHEMICAL CHARACTERISTICS

Chemical composition	Petroleum oil with lubricity additive
Physical form	Liquid
Odor	Amine
Bulk density	8.56 lbs/gal
Color of concentrate	Clear hazy blue-green liquid
pH: (5%)	9.0 to 9.9

APPLICATION PROCEDURE

Recommended starting water dilutions for:

Tapping, Reaming, Sawing	10:1/20:1
Milling, Drilling, Turning	10:1/20:1
Centerless, I.D., O.D. Grinding	20:1/30:1
Roll Forming	15:1/30:1

These are starting concentrations, adjust as necessary. Consult your Chemetall Americas representative for the proper use concentration. Always add Tech Cool 35200TM to water. Never add water to Tech Cool 35200TM concentrate.

SOLUTION CONTROL

TECH COOL 35200TM is easily and effectively controlled using a Handheld Refractometer. This is the best method of determining concentration on TECH COOL 35200TM.

For the Handheld Refractometer, the Conversion Factor (%) – 1.6

TECH COOL® 35200TM

Version 1.2
Revision Date 01/24/2013

Print Date 11/16/2013

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TECH COOL® 35200TM
MSDS Number : REL_76621

Company : Chemetall US, Inc.
675 Central Avenue
New Providence, NJ 07974

Telephone : +18005264473
Telefax : +19084644658
Emergency telephone no : CHEMTREC - 800-424-9300

SECTION 2. HAZARDOUS COMPONENTS INFORMATION

Component	CAS-No.	Weight percent
Hydrotreated Heavy Napthenic Oil	64742-52-5	10.00 - 30.00
Potassium borate	1332-77-0	3.00 - 7.00
Monoethanolamine	141-43-5	1.00 - 5.00
Potassium hydroxide	1310-58-3	1.00 - 5.00

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

SECTION 3. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid
Colour : blue
Odour : amine-like
Hazard Summary : Irritating to eyes. May cause skin irritation. Also harmful by inhalation and if swallowed.

Route(s) of Entry	Inhalation	Skin	Ingestion
	yes	yes	yes

Carcinogenicity:

NTP No substance in this product is listed by NTP as a carcinogen
IARC No substance in this product is listed by IARC as a carcinogen
OSHA No substance in this product is regulated by OSHA as a carcinogen

SECTION 4. FIRST AID MEASURES

Inhalation : Remove person to fresh air. If signs/symptoms continue, get

TECH COOL® 35200TMVersion 1.2
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	medical attention.
Skin contact	: Flush skin with large amounts of water. If irritation develops and persists, get medical attention.
Eye contact	: Rinse immediately with plenty of water for at least 15 minutes. Keep eye wide open while rinsing. Seek medical advice.
Ingestion	: Rinse mouth. Drink plenty of water. Obtain medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point	: Note: does not flash
Lower explosion limit	: Note: Not applicable.
Upper explosion limit	: Note: Not applicable.
Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus.
Further information	: Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Ensure adequate ventilation.
Methods for cleaning up	: Ventilate area. Clean up with inert absorbant material. Keep in suitable, closed containers for disposal. Flush with plenty of water.
Additional advice	: Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

Handling	
Handling	: Use only with adequate ventilation.
Storage	
Requirements for storage	: Keep containers dry and tightly closed to avoid moisture

TECH COOL® 35200TM

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areas and containers

absorption and contamination.

Store indoors in a cool, well-ventilated place

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV (TWA)	OSHA PEL (TWA)
Hydrotreated Heavy Napthenic Oil	5 mg/m3 As mineral oil mist	5 mg/m3 As mineral oil mist
Potassium borate	NONE	NONE
Monoethanolamine	3 ppm	3 ppm
Potassium hydroxide	2 mg/m3 ceiling	NONE

- Eye protection : Safety glasses with side-shields
- Hand protection : Impervious gloves
- Skin and body protection : Rubber or plastic apron
- Respiratory protection : If the occupational exposure limits cannot be met, suitable respirator equipment shall be worn.
- Hygiene measures : Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eye/face protection.
Wear suitable protective clothing.
Wash hands before breaks and immediately after handling the product.
Provide adequate ventilation.
Avoid generating excessive amounts of fumes and mists.
Keep away from food and drink.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- pH : 9.0 - 9.9
at 50.6 g/l
- Freezing point : -11.67 °C (10.99 °F)
- Boiling point/boiling range : Note: no data available
- Vapour pressure : Note: no data available
- Bulk density : 8.56 lb/gal
- Water solubility : Note: emulsifiable

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Partition coefficient: n-
octanol/water : Note: no data available

Relative density : 1.026

Evaporation rate : 1
Note: Water = 1**SECTION 10. STABILITY AND REACTIVITY**

Conditions to avoid : Direct sources of heat.

Materials to avoid : Strong acids

Hazardous decomposition
products : Nitrogen Oxides
Carbon oxides**SECTION 11. TOXICOLOGICAL INFORMATION**

Toxicity: : Mixture; Not Determined.

Acute oral toxicity
Monoethanolamine : LD50, rat
Dose: 2,140 mg/kgPotassium hydroxide : LD50, rat
Dose: 365 mg/kg**SECTION 12. ECOLOGICAL INFORMATION**

No data available

SECTION 13. DISPOSAL CONSIDERATIONSAdvice on Disposal : Refer to all federal, provincial, state and local regulation prior to
disposition of container and unused contents by reuse, recycle
or disposal.**SECTION 14. TRANSPORT INFORMATION**

Refer to Bill of Lading.

TECH COOL® 35200TM

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SECTION 15. REGULATORY INFORMATION

TSCA Status	:	All components of this material comply with US TSCA requirements.
SARA 313 Components	:	NONE
CERCLA Reportable Quantity	:	Potassium hydroxide 1,000 Pounds
California Prop. 65	:	N.D
NFPA	:	1 0 0
HMIS	:	1 0 0 C

SECTION 16. OTHER INFORMATION**Further information**

Chemetall US, Inc. warrants that the products described herein will conform with its published specifications. The products supplied by Chemetall and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Chemetall materials for their own particular purpose. Since buyer's conditions of use of products are beyond Chemetall's control, Chemetall does not warrant any recommendations and information for the use of such products. CHEMETALL DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

EQUIPMENT

The Chemetall Americas Refractometer (0-10 Brix) can be used to measure the refractive index (Brix) of this product/solution. Water driven proportioners can be used to automatically feed the premixed solution of this product to the sumps and the Coolant Filter System can be used to filter out sludge and oils from the metal working fluids to extend sump life. Please contact the Chemetall Americas Process Equipment and Engineering Department for specific recommendations.

NOTES ON USE — (see Material Safety Data Sheet)

SAFETY AND HANDLING

Prior to handling and use of the material referenced in this document, the Material Safety Data Sheet should be read and understood by all personnel in contact with these materials.

KEEP OUT OF REACH OF CHILDREN

STORAGE

Dry indoor storage at temperatures between 40°F (4.4° C) and 100°F (37.8°C) is recommended, away from any incompatible materials referenced in the Material Safety Data Sheet. All containers should be tightly closed when not in use.

Tech Cool 35200™ will potentially freeze if exposed to less than 32°F for extended time. Should this occur, the material should be brought to room temperature and thoroughly mixed prior to use.

DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, providential and local regulations. Process solutions can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.

Chemetall U.S. Inc. ("Chemetall") warrants that this product or products described herein will conform with its published specifications. The products supplied by Chemetall and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Chemetall materials for their own purposes. Since buyer's conditions of use of products are beyond Chemetall's control, Chemetall does not warrant any recommendations and information for the use of such products. CHEMETALL DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

Chemetall



ISO 9001/FM 93653

GALAXYPHOS 241 DS

Typical Specifications (Contd.)

Phosphates.....	Yes
Chelates.....	None
Silicates.....	None
Normal Working Concentrations	2% to 5% by volume spray, 2% to 10% immersion
Normal Working Temperatures	100°F to 145°F

Operational Notes

Galaxyphos 241 DS is typically used as the first stage of a two- or three- stage spray washer, or as a third stage of a four- or five-stage washer. As a first stage spray cleaner, a concentration of 3% to 5% is typical. As a third stage spray cleaner, concentrations of 2% to 4% by volume should be used. Concentrations will need to be higher in immersion, or lower temperature systems. Your Galaxy representative will install the product using the nominal concentrations for a given system.

Typical spray washer configurations give an application time of from 45 seconds to two or more minutes. The typical use temperature range is 100°F – 140°F.

Phosphate coating weights are controlled by modifying the pH of the operating bath. pH from 3.8 to 6.5 will yield iron phosphates of diminishing coating weights with increasing pH. Your Galaxy representative will determine the optimum pH for a given system.

To prepare a bath of **Galaxyphos 241 DS**, begin by partly filling tanks with water. Add the appropriate amount of **Galaxyphos 241 DS**, typically 2 to 5 gallons per 100 gallons of bath volume. Add the remaining water to the final level. Heat to at least 100°F, and then turn on the recirculation pump. Titrate and control as described below. The pH of the system can be adjusted down using **Galaxy 620** or phosphoric acid to the level determined by your Galaxy representative. Upward adjustment of pH can be done using soda ash (recommended) or caustic soda liquid. Many applications will not require pH adjustment at all.

Proper and thorough fresh water rinsing will yield optimum surfaces for painting. A deionized water final rinse is recommended.

Galaxy 610 ADD can be used to aid rinsing in less than optimum water conditions.

Equipment Notes: Mild steel tanks and fittings can be used. Stainless steel, preferably Types 304 or 316, will result in less maintenance and greater durability of equipment. CPVC schedule 80 risers, headers and nozzles can also give better overall performance with lower down time for maintenance or repair.

No warranty, guarantee or representation is made herein with respect to the use of the products referenced herein or otherwise except that said products conform to the chemical description shown on their labels.

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GALAXYPHOS 241 DS

Solution Control

Buret Method

1. Take a 10 milliliter sample.
2. Add 3 drops of phenolphthalein indicator.
3. Titrate 0.1N Sodium Hydroxide, until the color changes from colorless to pink. Record the number of milliliters.

Percent by Volume **Galaxyphos 241 DS** = milliliters x 0.333

Dropper Test Method

1. Take a 10 ml sample.
2. Add 5 drops of Phenolphthalein Indicator.
3. Add 1.0N Sodium Hydroxide drop wise, swirling to mix, while counting the drops until the color changes to red. Record the number drops.

Percent by volume **Galaxyphos 241 DS** = drops x 0.21

For each milliliter below the desired operating range, add about 1/3 gallon of **Galaxyphos 241 DS** per 100 gallons of bath.

Caution

DANGER: Acidic Product. Liquid. Corrosive. Can irritate or burn eyes. Can cause severe skin irritation. Harmful if swallowed. Do not get in eyes or on skin or clothing. Do not take internally.

In case of eye and skin contact, flush with plenty of cool water for at least 15 minutes. Get immediate medical attention. Remove contaminated clothing. Wash affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use. If ingested, DO NOT INDUCE VOMITING. If conscious, give large quantities of water. Get immediate medical attention. For inhalation, remove to fresh air. Treat symptoms. Get medical attention.

Do not store in direct sunlight or hot area. Open drums slowly to vent. Handle with rubber gloves, rubber apron, chemical goggles, face mask, and rubber boots. Avoid breathing vapor or mist. Eye wash and safety shower, or some other means of washing product off personnel, must be immediately available. Personnel handling this product should be acquainted with its characteristics and dangers. Do not mix with acids. Keep out of reach of children. Not for manual use. L02-07

Consult MSDS for complete safety information.

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Fremont Industrial
Galaxy Automotive
Galaxy Pulp & Paper
Galaxy Transportation
Galaxy

Obsolete Material

800.661.3443
513.731.5350
513.731.0578 /

GALAXY
ASSOCIATES
2828 Highland Avenue
Cincinnati, OH 45212

GALAXYPHOS 241 DS

Attention

When empty, the container may still be hazardous. Because containers, even after they have been emptied, still retain product residues (vapor, liquid or solid), all labeled hazard precautions must be observed. If emptied product containers of 119 gallons or greater volume are to be shipped, DOT requires the containers be triple rinsed (or equivalent) to remove any residue and DOT placards be removed or covered with plain placards before they

Issued 3/17/05, Supersedes:

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GALAXYPHOS 241 DS**Material Safety Data Sheet****GALAXY ASSOCIATES, INC.**2828 Highland Avenue
Cincinnati, Ohio 45212CHEMTREC Emergency Number: 800-424-9300
Health Emergency Number: 513-244-1211

Customer Service Number: 800-661-9443

The information on this Material Safety Data Sheet is in compliance with OSHA Hazard Communication Standard 29CFR 1910.1200. Information pertains to product as received in original container.

1. PRODUCT IDENTIFICATION**PRODUCT:** GALAXYPHOS 241 DS**HMIS RATING:**

HEALTH:	2
FLAMMABILITY:	1
REACTIVITY:	0
OTHER:	

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Severe

2. HAZARDOUS INGREDIENT INFORMATION

The following ingredients have been found to be hazardous according to OSHA 1910.1200. Please refer to additional information in Section 16 for details on the hazards of these ingredients.

Hazardous Ingredient	CAS Number	% w/w	TLV
Sodium Xylene Sulfonate	1300-72-7	1-5	N/AP
Hydroxylamine Sulfate	10039-54-0	1-5	N/AP

3. EXPOSURE**ROUTES OF EXPOSURE:** Eye, Skin

HUMAN HEALTH HAZARDS: Corrosive. Will cause eye burns and permanent tissue damage. May cause severe skin irritation or tissue damage depending on the length of exposure. Ingestion causes chemical burns to the mouth, throat and stomach. Inhalation in high concentrations, is irritating to eyes, nose, throat and lungs.

GALAXY ASSOCIATES, INC.2828 Highland Avenue
Cincinnati, Ohio 45212CHEMTREC Emergency Number: 800-424-9300
Health Emergency Number: 513-244-1211

Customer Service Number: 800-661-9443

4. FIRST AID MEASURES

For eye contact, immediately flush eyes with water for at least 15 minutes holding eyelids apart. Get immediate medical attention. For skin contact, immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing. Wash affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use. If ingested, DO NOT INDUCE VOMITING. If conscious, give large quantities of water. Get immediate medical attention. For inhalation, remove to fresh air. Treat symptoms. Get medical attention.

Note to Physician:

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES**FLASHPOINT:** None**EXTINGUISHING MEDIA:** Use extinguishing media appropriate to surrounding fire.**FIRE AND EXPLOSION HAZARDS:** Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas. May evolve oxides of phosphorus and sulfur under fire conditions.**PROTECTIVE EQUIPMENT FOR EMERGENCY RESPONSE:** In case of fire, wear self contained breathing apparatus and protective suit.**6. ACCIDENTAL RELEASE MEASURES**

EMERGENCY RESPONSE RECOMMENDATIONS: Restrict access to area. Ventilate area. Do not touch spilled material. Clean-up should be conducted by trained personnel only. Stop leaks. Use proper personal protective equipment.

GALAXYPHOS 241 DS

Material Safety Data Sheet

GALAXY ASSOCIATES, INC.

2828 Highland Avenue
Cincinnati, Ohio 45212

CHEMTREC Emergency Number: 800-424-9300
Health Emergency Number: 513-244-1211

Customer Service Number: 800-661-9443

CLEAN UP RECOMMENDATIONS: Small Spills – Soak up spill with absorbent material. Place residues in suitable, covered, properly labeled container. Wash affected area. Large Spills – Contain liquid using absorbent material or by diking. Reclaim into recovery drums for proper disposal. Wash area thoroughly with water. Contact approved waste hauler for proper disposal.

Dispose of material in compliance with local, state and federal regulations. Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING AND STORAGE: Do not get in eyes, on skin, or on clothing. Do not take internally. Use with adequate ventilation. Avoid generating mists or aerosols. Keep containers closed when not in use. Store separately from bases.

8. PERSONAL PROTECTION RECOMMENDATIONS

Respiratory Protection: If mists, vapors or aerosols are generated, use a NIOSH approved respirator. If necessary, use SCBA protective equipment.

Eye Protection: Face shield with chemical goggles

Hand Protection: Chemical resistant gloves, Neoprene, rubber

Protective Equipment: Eye wash and safety shower. If clothing is contaminated, remove clothing and thoroughly wash affected area. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear
Odor	Mild
Solubility in Water	Complete
pH (100%)	3.3 + .3
Density	10.36 lb/gal.

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Cincinnati, Ohio 45212CHEMTREC Emergency Number: 800-424-9300
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10. STABILITY AND REACTIVITY**STABILITY:** Stable**CONDITIONS TO AVOID:** High temperatures, direct sunlight

MATERIALS TO AVOID: Contact with strong alkalis (e.g. ammonia and its solutions, carbonates, sodium hydroxide, potassium hydroxide, calcium hydroxide, cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors. Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia under fire conditions.

11. TOXICOLOGICAL DATA

No toxicity studies have been conducted on this product.

CARCINOGENICITY: This product does not contain ingredients listed as carcinogens by IARC (International Agency for Research on Cancer), the NTP (National Toxicology Program), or ACGIH (American Conference of Governmental Industrial Hygienists).

12. ECOLOGICAL INFORMATION**ECOLOGICAL EFFECTS:**

No toxicity studies have been conducted on this product.

13. DISPOSAL CONSIDERATIONS

This product is corrosive. Contact a licensed hazardous waste transporter for proper treatment and disposal. Consult local, state, and federal regulations for specific requirements.

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14. TRANSPORTATION INFORMATION

The Proper Shipping Name listed below is based on DOT regulations and may vary by package size and mode of transportation. This information is for informational purposes and should not replace the Bill of Lading (shipping paper).

LAND TRANSPORT:Corrosive Liquid, Acidic, Inorganic, N.O.S.,
(Hydroxylamine Sulfate) 8, UN3264, III**15. REGULATORY INFORMATION**

The following information is based on national regulations:

TSCA: All ingredients used in the make up of this product are listed on TSCA (Toxic Substance Control Act).

CERCLA/SUPERFUND, 40 CFR 117.302: This product does not contain any reportable substances.

SARA Title III, Section 302, Extremely Hazardous Substances, 40 CFR 355:
This product does not contain Extremely Hazardous Substances.

SARA Title III, Sections 311 and 312, Material Safety Data Sheet Requirements, 40 CFR 370: Immediate (Acute) Health Hazard

SARA Title III, Section 313, List of Toxic Chemicals, 40 CFR 372:
This product does not contain substances on the List of Toxic Chemicals.

State Right to Know Laws (Reportable Chemicals):
This product does not contain reportable substances.

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16. Other Pertinent Product Information**CAUTION STATEMENT**

DANGER: Acidic Product. Liquid. Corrosive. Can irritate or burn eyes. Can cause severe skin irritation. Harmful if swallowed. Do not get in eyes or on skin or clothing. Do not take internally.

In case of eye and skin contact, flush with plenty of cool water for at least 15 minutes. Get immediate medical attention. Remove contaminated clothing. Wash affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use. If ingested, DO NOT INDUCE VOMITING. If conscious, give large quantities of water. Get immediate medical attention. For inhalation, remove to fresh air. Treat symptoms. Get medical attention.

Do not store in direct sunlight or hot area. Open drums slowly to vent. Handle with rubber gloves, rubber apron, chemical goggles, face mask, and rubber boots. Avoid breathing vapor or mist. Eye wash and safety shower, or some other means of washing product off personnel, must be immediately available. Personnel handling this product should be acquainted with its characteristics and dangers. Do not mix with acids. Keep out of reach of children. Not for manual use.

L02-07

Prepared by: Product Safety Group

Date Prepared: 11/01/2006

Supersedes: 05/20/2002

GX 1207

Material Safety Data Sheet

GALAXY ASSOCIATES, INC.

4370 Malsbary Road, Suite 200
Cincinnati, Ohio 45242-5653

CHEMTREC Emergency Number: 800-424-9300
Health Emergency Number: 513-244-1211

Customer Service Number: 800-661-9443

The information on this Material Safety Data Sheet is in compliance with OSHA Hazard Communication Standard 29CFR 1910.1200. Information pertains to product as received in original container.

1. PRODUCT IDENTIFICATION

PRODUCT: **GX 1207**

HMIS RATING:

HEALTH:	1
FLAMMABILITY:	0
REACTIVITY:	0
OTHER:	

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Severe

2. HAZARDOUS INGREDIENT INFORMATION

The following ingredients have been found to be hazardous according to OSHA 1910.1200. Please refer to additional information in Section 16 for details on the hazards of these ingredients.

Hazardous Ingredient	CAS NUMBER	% w/w	TLV
Triethanolamine	102-71-6	10-15	NAP
Monethanolamine	141-43-5	5-10	3 ppm

3. HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE: Eye, Skin

HUMAN HEALTH HAZARDS:

Eye and skin contact may cause irritation with prolonged contact. Aspiration into the lungs can cause chemical pneumonitis. Excessive vapor inhalation may cause headache and/or dizziness. Repeated excessive exposures to high amounts of triethanolamine may cause liver and kidney effects.

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4. FIRST AID

Flush eyes and skin with water. If symptoms develop, obtain medical attention. Do not induce vomiting. If conscious, give water. Obtain medical attention. If inhaled, remove to fresh air. Treat symptoms. Obtain medical attention.

5. FIRE FIGHTING MEASURES**FLASHPOINT:** None

EXTINGUISHING MEDIA: Carbon Dioxide, Water spray, dry powder, foam. Use extinguishing media appropriate for surrounding fire. Water may be ineffective, but should be used to keep exposed containers cool. A direct stream of water may cause the fire to spread. The material will float on water.

FIRE AND EXPLOSION HAZARDS: May evolve oxides of carbon and hydrogen under fire conditions.

PROTECTIVE EQUIPMENT FOR EMERGENCY RESPONSE: Wear self-contained breathing apparatus and impervious gear.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY RESPONSE RECOMMENDATIONS: Wear protective clothing. Restrict access to area. Stop leaks. Ventilate area if possible. Do not contaminate surface waters.

CLEAN UP RECOMMENDATIONS: **SMALL SPILLS** – Soak up with absorbent material. Place residues in suitable, covered, labeled container. Wash affected area. **LARGE SPILLS** – Contain liquid with absorbent material. Reclaim into recovery container for proper disposal. Dispose of material in compliance with local, state and federal regulations.

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7. HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid eye and skin contact. Do not take internally. Keep containers closed with not in use.

8. PERSONAL PROTECTION RECOMMENDATIONS

Respiratory Protection: Not normally needed. NIOSH/MSHA approved organic vapor respirator when vapors are generated above the permissible limit.

Eye Protection: Wear chemical goggles.

Hand Protection: Wear chemical resistant gloves; Neoprene, Nitrile, PVC

Protective Equipment: Wear standard protective clothing. Have eye wash and safety shower available. If clothing is contaminated, remove and thoroughly wash affected area. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear AMBER
Odor	Characteristic
Solubility in Water	Complete
Density	8.66 lb/gal.
Specific Gravity	1.04

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Sources of ignition.

MATERIALS TO AVOID: Avoid contact with strong oxidizers (e.g. chlorine, peroxides, chromates, etc.) Oxidizers may generate heat, fires, explosions and/or toxic vapors. Avoid reducing agents. Contains amines. Do not add sodium nitrite or other nitrosating agents to this product because suspected cancer-causing nitrosamines may be formed

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HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and hydrogen.

11. TOXICOLOGICAL DATA

No toxicity studies have been conducted on this product.

CARCINOGENICITY: This product does not contain ingredients listed as carcinogens by IARC (International Agency for Research on Cancer), the NTP (National Toxicology Program), or ACGIH (American Conference of Governmental Industrial Hygienists).**12. ECOLOGICAL INFORMATION****ECOLOGICAL EFFECTS:** No toxicity studies have been conducted on this product.**13. DISPOSAL CONSIDERATIONS**

This product is not a hazardous waste as defined by RCRA. Contact a properly licensed waste management facility for disposal requirements.

14. TRANSPORTATION INFORMATION

The Proper Shipping Name listed below is based on DOT regulations and may vary by package size and mode of transportation. This information is for informational purposes and should not replace the Bill of Lading (shipping paper).

LAND TRANSPORT: Product is not regulated during transportation**15. REGULATORY INFORMATION**

The following information is based on national regulations:

TSCA: All ingredients used in the make up of this product are listed on TSCA (Toxic Substance Control Act).

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Material Safety Data Sheet

GALAXY ASSOCIATES, INC.

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CHEMTREC Emergency Number: 800-424-9300
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CERCLA/SUPERFUND, 40 CFR 117.302: Notification of spills of this product is not required.

SARA Title III, Section 302, Extremely Hazardous Substances, 40 CFR 355: Does not contain any substance listed as an Extremely Hazardous Substance.

SARA Title III, Sections 311 and 312, Material Safety Data Sheet Requirements, 40 CFR 370: Immediate (Acute) Health Hazard

SARA Title III, Section 313, List of Toxic Chemicals, 40 CFR 372: Does not contain any substance listed under this regulation.

State Right to Know Laws (Reportable Chemicals): The following substances are listed under this regulation.

Triethanolamine
Monoethanolamine

16. Other Pertinent Product Information

CAUTION STATEMENT

CAUTION: Eye and skin contact may cause irritation with prolonged contact. Harmful if swallowed. Do not get in eyes or on skin. Do not take internally.

Open drums slowly to vent. Handle with rubber gloves, rubber apron, chemical goggles, face mask, and rubber boots. Avoid breathing vapor or mist. Eyewash and safety shower must be immediately available. Personnel handling this product should be acquainted with its characteristics and dangers. Do not mix with acids. Not for manual use. Keep out of the reach of children.

L02-01

Prepared by: Product Safety Group

Date Prepared: 05/14/2008

Supersedes: 06/12/2007